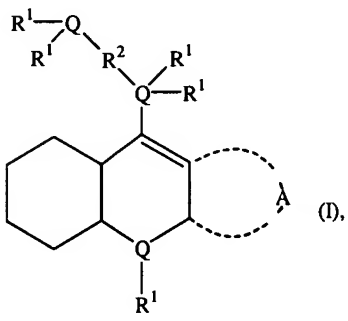
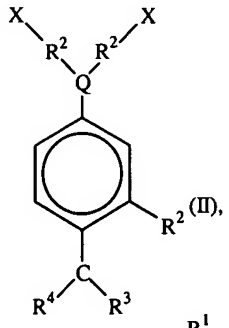
AMENDMENTS TO THE CLAIMS

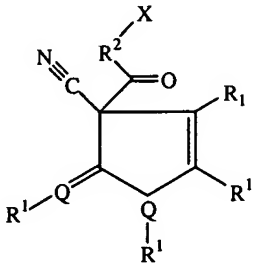
1. (Original) A kit for activating gene transfer, said kit comprising a gene transfer activating compound, packaged in a suitable container together with instructions for use to activate gene transfer.

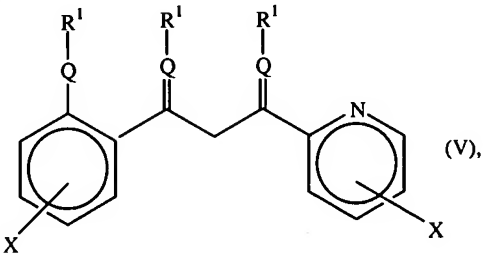
2. (Original) The kit of claim 1 wherein said gene transfer activating compound has a molecular weight of between 300 and 2000.

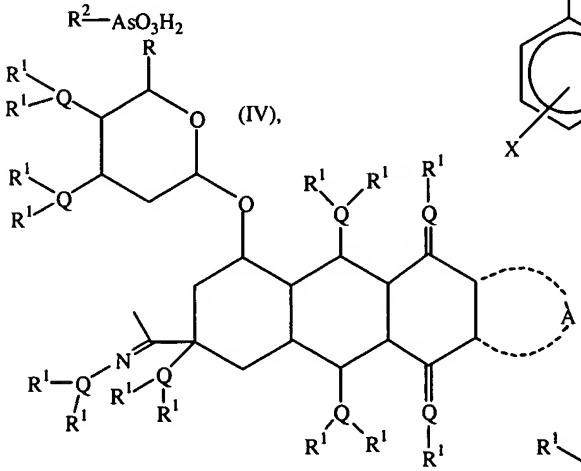
3. (Original) The kit of claim 1 wherein said gene transfer compound is selected from the group consisting of:


(I),

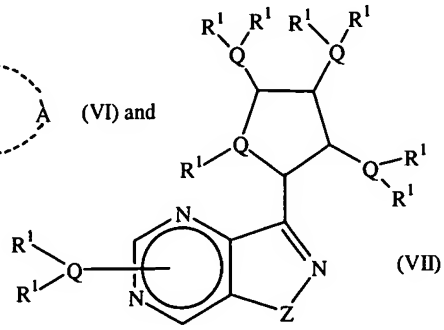

(II),


(III),


(V),

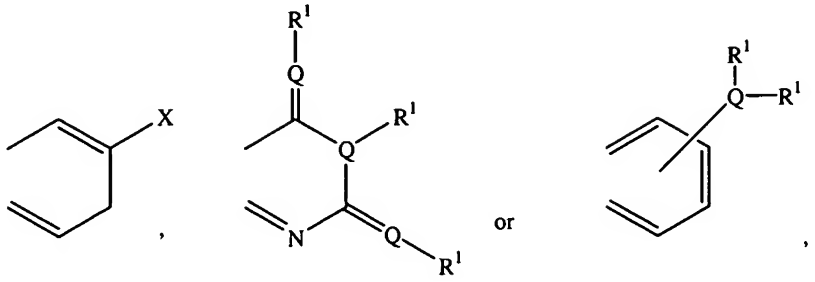

(IV),

(VI) and


(VII)

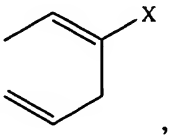
wherein Q is nitrogen or oxygen, wherein each occurrence of R^1 independently is H, CH_3, CH_2CH_3 or a nullity, wherein R^2 is C_1-C_{18} alleyl, C_2-C_{18} ether, C_2-C_{18} thioether, C_2-C_{18} secondary or tertiary amine,

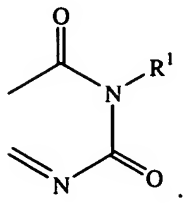
wherein A is



wherein R^3 is H, C_1-C_6 alkyl, or a heteroatom substituted C_1–C_6 alkyl where the heteroatom is oxygen, nitrogen, or sulfur, wherein R^4 is C_2–C_6 amide, or =N–R^5 where R^5 is C_7–C_{12} aryloxyl, C_1–C_6 hydronyl, carbonyl, carboxyl, or acyl, imidazyl, pyrazyl, thiazyl, or oxazyl, wherein X is H, F, Cl or Br, wherein Z is oxygen or sulfur.

4. (Original) The kit of claim 1 wherein said gene transfer compound is bouvardin.

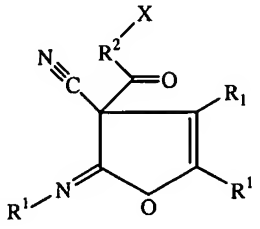
5. (Original) The kit of claim 3 wherein said gene transfer compound is that of structure I, wherein A is  , and Q is nitrogen in each occurrence.

6. (Original) The kit of claim 3 wherein said gene transfer compound is that of structure I, wherein A and each occurrence of Q together are  .

7. (Original) The kit of claim 3 wherein said gene transfer compound is that of structure II wherein Q is nitrogen and R^2 is C_1–C_{18} alkyl.

8. (Original) The kit of claim 7 wherein R^4 is $=N–R^5$.

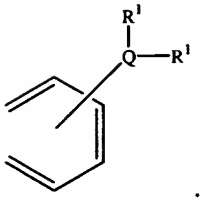
9. (Original) The kit of claim 7 wherein X is Cl or Br.

10. (Original) The kit of claim 3 wherein said gene transfer compound is that of structure III wherein Q in each occurrence together are 

11. (Original) The kit of claim 10 wherein said gene transfer compound is that of structure II or VII wherein each occurrence of R^1 is H, or CH_3.

12. (Original) The kit of claim 3 wherein said gene transfer compound is that of structure V wherein Q in each occurrence is oxygen.

13. (Original) The kit of claim 3 wherein said gene transfer compound is that of structure VI wherein Q in each occurrence is oxygen.

14. (Original) The kit of claim 13 wherein A is 

.

15. (Original) The kit of claim 3 wherein said gene transfer compound is that of structure VII wherein Q in each non-aromatic substituent occurrence is oxygen.

16. (Original) The kit of claim 15 wherein R^1 in each occurrence is H.

17. (Original) The kit of claim 3 wherein said compound is selected from the group consisting of: NSC73609, NSC82090, NSC101492, NSC102821, NSC106191, NSC108613, NSC109325, NSC128720, NSC143491, NSC259968, NSC373989 and NSC675865.

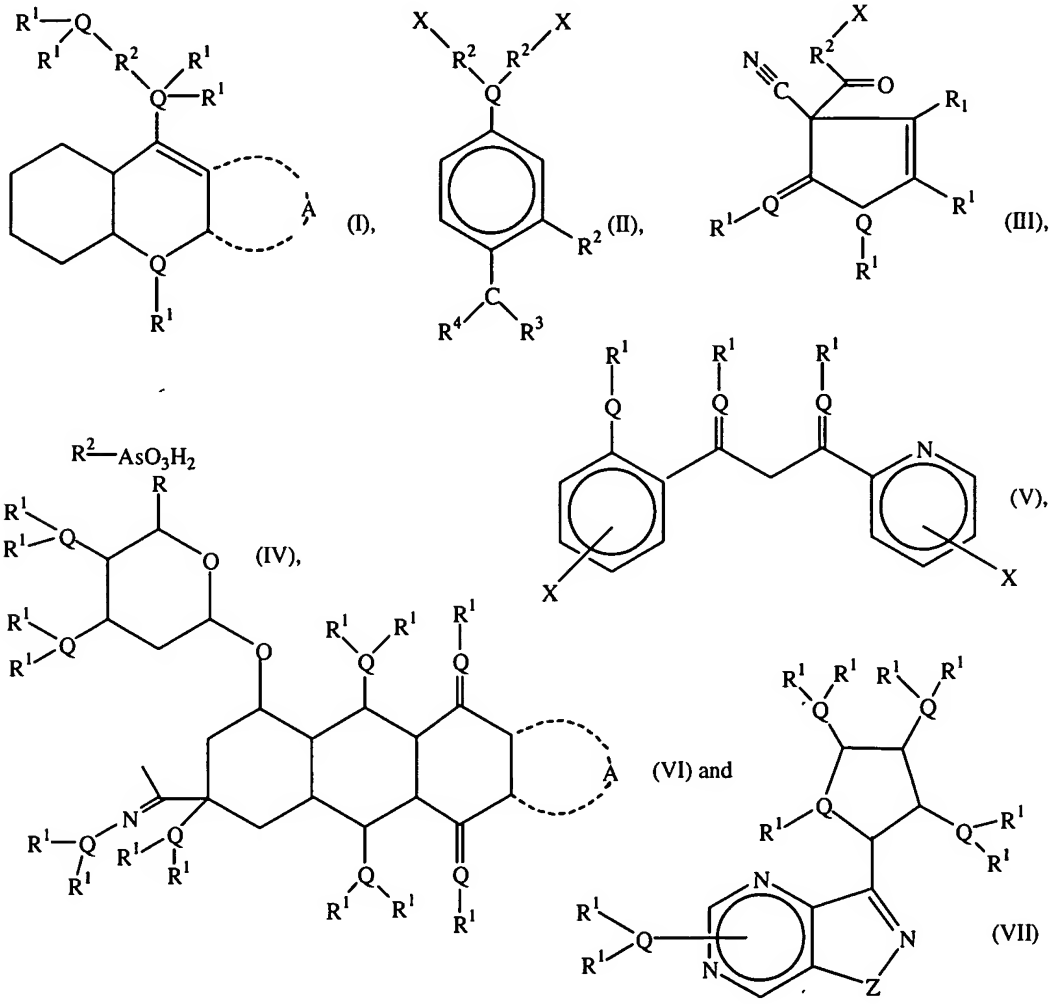
Claims 18-27 (Canceled)

28. (Currently Amended) ~~The process of claim 27~~ A process for activating gene transfer of a vector to a cell comprising the steps of:

contacting a cell with a recombinant gene transfer vector; and

administering a gene transfer activating compound to the cell, such that transfer of the vector to the cell is activated;

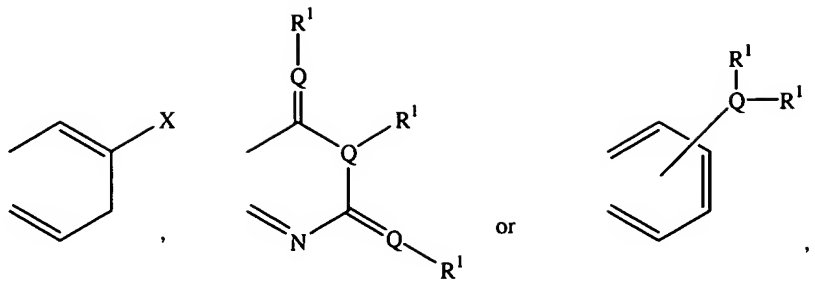
wherein the gene transfer activating compound is selected from the group consisting of:



(I), (II), (III), (IV), (V), (VI) and (VII)

wherein Q is nitrogen or oxygen, wherein each occurrence of R^1 independently is H, CH_3, CH_2CH_3 or a nullity, wherein R^2 is C_1-C_{18} alleyl, C_2-C_{18} ether, C_2-C_{18} thioether, C_2-C_{18} secondary or tertiary amine,

wherein A is



wherein R^3 is H, C_1-C_6 alkyl, or a heteroatom substituted C_1–C_6 alkyl where the heteroatom is oxygen, nitrogen, or sulfur, wherein R^4 is C_2–C_6 amide, or =N–R^5 where R^5 is C_7–C_{12} aryloxyl, C_1–C_6 hydronyl, carbonyl, carboxyl, or acyl, imidazyl, pyrazyl, thiazyl, or oxazyl, wherein X is H, F, Cl or Br, wherein Z is oxygen or sulfur.

29. (Currently Amended) ~~The process of claim 27~~ A process for activating gene transfer of a vector to a cell comprising the steps of:

contacting a cell with a recombinant gene transfer vector; and

administering a gene transfer activating compound to the cell, such that transfer of the vector to the cell is activated;

wherein the gene transfer activating compound is selected from the group consisting of: NSC73609, NSC82090, NSC101492, NSC102821, NSC106191, NSC108613, NSC109325, NSC128720, NSC143491, NSC259968, NSC373989 and NSC675865.

Claims 30-35 (Canceled)

36. (Original) A process for determining the efficacy of a putative gene transfer activating compound to activate gene transfer, comprising the steps of:

administering a test compound to a first cell;

contacting the first cell with a first amount of a recombinant vector;

contacting a second cell with a second amount of the recombinant vector, the second amount of the recombinant vector substantially equal to the first amount;

measuring a gene transfer indicator in the first cell to obtain a test measurement;

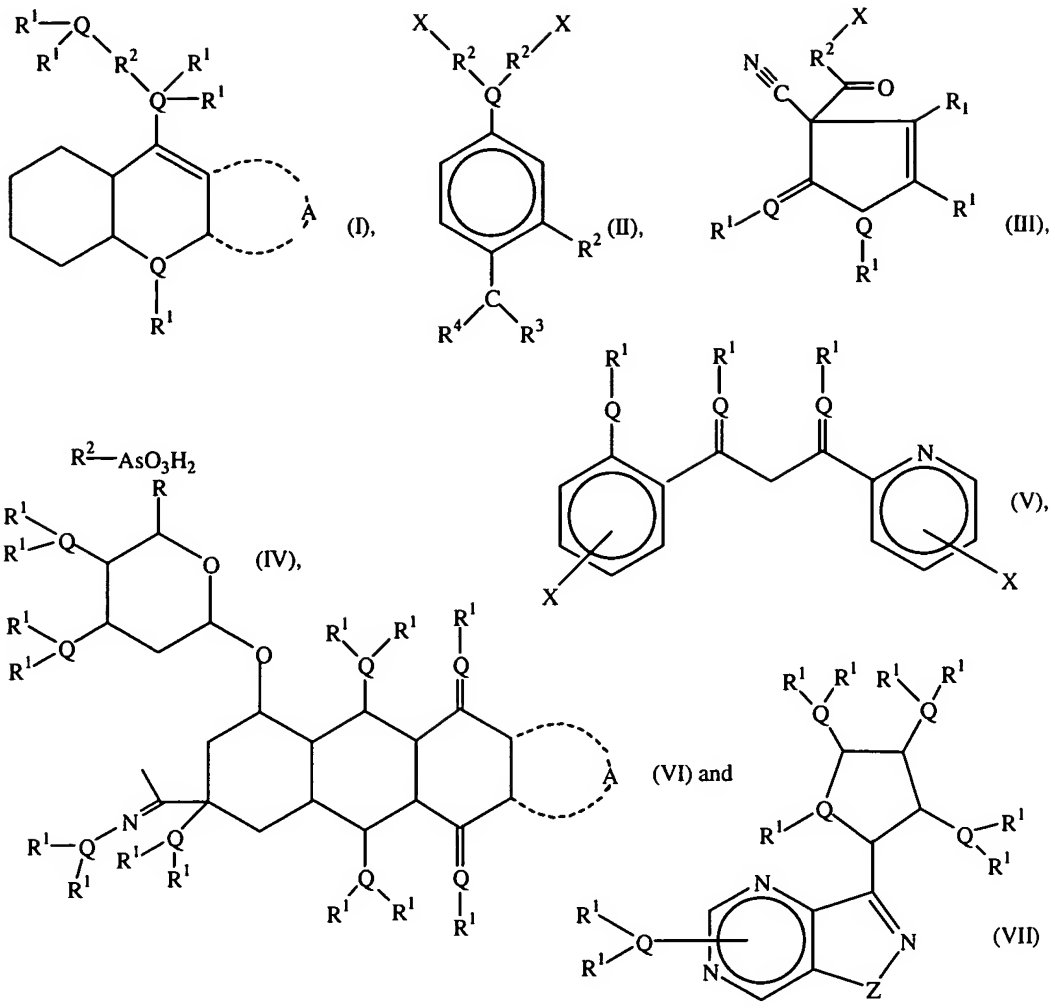
measuring the gene transfer indicator in the second cell to obtain a control measurement; and

comparing the test measurement and the control measurement to determine the efficacy of the putative gene transfer activating compound to activate gene transfer.

37. (Original) Use of a compound of Formulae I-VII for use as a gene transfer activating compound.

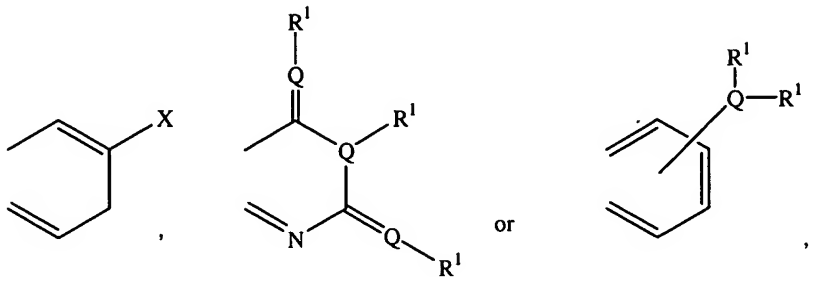
38. (Original) The use of claim 37 wherein said gene transfer activating compound has a molecular weight of between 300 and 2,000.

39. (Original) The use of claim 37 wherein said gene transfer compound is selected from the group consisting of:



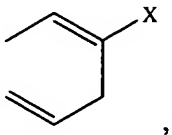
wherein Q is nitrogen or oxygen, wherein each occurrence of R^1 independently is H, CH_3, CH_2CH_3 or a nullity, wherein R^2 is C_1-C_{18} allyl, C_2-C_{18} ether, C_2-C_{18} thioether, C_2-C_{18} secondary or tertiary amine,

wherein A is

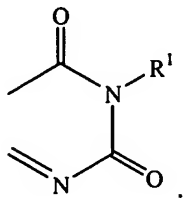


wherein R^3 is H, C_1-C_6 alkyl, or a heteroatom substituted C_1–C_6 alkyl where the heteroatom is oxygen, nitrogen, or sulfur, wherein R^4 is C_2–C_6 amide, or =N–R^5 where R^5 is C_7–C_{12} aryloxyl, C_1–C_6 hydronyl, carbonyl, carboxyl, or acyl, imidazyl, pyrazyl, thiazyl, or oxazyl, wherein X is H, F, Cl or Br, wherein Z is oxygen or sulfur.

40. (Original) The use of claim 37 wherein said gene transfer compound is bouvardin.

41. (Original) The use of claim 39 wherein said gene transfer compound is that of structure I, wherein A is 

, and Q is nitrogen in each occurrence.

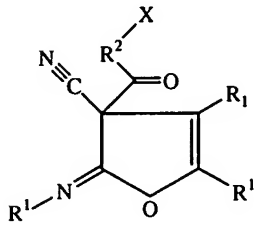
42. (Original) The use of claim 39 wherein said gene transfer compound is that of structure I, wherein A and each occurrence of Q together are 

.

43. (Original) The use of claim 39 wherein said gene transfer compound is that of structure II wherein Q is nitrogen and R^2 is C_1–C_{18} alkyl.

44. (Original) The use of claim 43 wherein R^4 is =N–R^5.

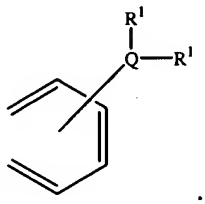
45. (Original) The use of claim 43 wherein X is Cl or Br.

46. (Original) The use of claim 39 wherein said gene transfer compound is that of structure III wherein Q in each occurrence together are 

47. (Original) The use of claim 46 wherein said gene transfer compound is that of structure II or VII wherein each occurrence of R^1 is H, or CH_3.

48. (Original) The use of claim 39 wherein said gene transfer compound is that of structure V wherein Q in each occurrence is oxygen.

49. (Original) The use of claim 39 wherein said gene transfer compound is that of structure VI wherein Q in each occurrence is oxygen.

50. (Original) The use of claim 49 wherein A is  .

51. (Original) The use of claim 39 wherein said gene transfer compound is that of structure VII wherein Q in each non-aromatic substituent occurrence is oxygen.

52. (Original) The use of claim 51 wherein R^1 in each occurrence is H.

53. (Original) The use of claim 39 wherein said compound is selected from the group consisting of: NSC73609, NSC82090, NSC101492, NSC102821, NSC106191, NSC108613, NSC109325, NSC128720, NSC143491, NSC259968, NSC373989 and NSC675865.

54. (Canceled)